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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,044	09/26/2003	John Hilbert	51251/FLC/F392	8049

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EXAMINER

PEGGINS, KRISTAL J

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,044

Applicant(s)

HILBERT, JOHN

Examiner

K. Feggins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6 & 8-11 rejected under 35 U.S.C. 102(b) as being anticipated by Morizono et al. (US 2002/0051055 A1).

Morizono et al. disclose the following claimed limitations:

- * regarding claim 1, a direct thermal printer/image recorder/ (Abstract, fig 1);
- * a thermal energy source/laser, 21/;
- * a thermal energy modulator/24/ receiving thermal energy from the thermal energy source/laser, 21/ and transmitting modulated thermal energy to a thermal print medium/11/ (fig 1, 5);
- * a controller /28/coupled to the thermal energy source/21/ and the thermal energy modulator/24/ (figs 1, 5-7).
- * regarding claim 2, wherein the thermal energy source is a laser/21/.
- * regarding claim 3, wherein the thermal energy modulator is a movable reflective surface (para 0040-0044, fig 1).

* regarding claim 4, wherein the thermal energy source is a heater element/laser/ (fig 1).

* regarding claim 6, wherein the thermal energy source is a radiant light device/laser/ (fig 1).

* regarding claim 8, further comprising a thermal medium drive mechanism coupled to the controller/28/ (para 0035, fig 1).

* regarding claim 9, wherein the output power of the thermal energy source is controlled by the controller (para 0035, figs 1, 5-7)

* regarding claim 10, a direct thermal printer (Abstract, fig 1, a printhead that prints directly onto the medium);

* thermal energy source/21/ means for generating thermal energy (fig 1);

* thermal energy moderator/24/ means for receiving thermal energy from the thermal energy source/21/ and transmitting modulated thermal energy to a thermal print medium/11/ (fig 1);

* controller/28/ means, coupled to the thermal energy source/21/ means and the thermal energy moderator/24/ means for controlling the operations of the direct thermal printer (para 0035, fig 1).

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- * regarding claim 11, a thermal printer (Abstract, fig 1);
- * a direct thermal print head/12/ comprising an array of laser elements (Abstract);
- * a thermal medium drive mechanism (para 0035, fig 1);
- * a controller/28/ coupled to the direct thermal print head/12/ and the thermal medium drive mechanism (para 0035, fig 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morizono et al. (US 2002/0051055 A1) in view of Agano (US 6,281,921 B1).

Morizono et al. disclose the following claimed limitations:

* regarding claim 5, wherein the thermal energy modulator is an LCD shutter device.

Agano discloses the following claimed limitation:

* regarding claim 5, wherein the thermal energy modulator is an LCD shutter device (col 5, lines 66-67, col 6, lines 1-7) for the purpose of providing external modulation.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize a thermal energy modulator that is an LCD

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shutter device, as taught by Agano into Morizono et al. for the purpose of providing external modulation.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morizono et al. (US 2002/0051055 A1) in view of Agano (US 6,281,921 B1).

Morizono et al. disclose the following claimed limitations:

* regarding claim 7, wherein the thermal energy modulator is an LCD shutter device.

Agano disclose the following claimed limitation:

* regarding claim 7, wherein the thermal energy modulator is an LCD shutter device (col 5, lines 66-67, col 6, lines 1-7) for the purpose of providing external modulation.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize a thermal energy modulator that is an LCD shutter device, as taught by Agano into Morizono et al. for the purpose of providing external modulation.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Goto et al. (US 5,909,232) disclose a thermal recording system for preheating a thermosensitive recording medium and method therefor. Nacman et al. (US 6,349,641) disclose a multiple diode imaging system including a multiple channel beam modulation integrated circuit. Shirota et al. (US 6,753,896 B2) disclose a laser

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drawing apparatus and laser drawing method. Takeuchi (US 6,791,594 B2) disclose a laser imaging apparatus. Rudi (US 6,798,439 B2) disclose a thermal recording by means of a flying spot.

Communication With The USPTO

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talbott Dave can be reached on 571-272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


K. Feggins 3/05
Primary Examiner
March 4, 2005